



Facilities Management

An Extension of ERP



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President, EIPCI

ray-

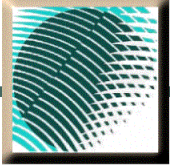
summerell@eastislands.com

Bruce P. Hanna
Vice President, FIS

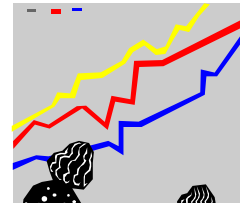
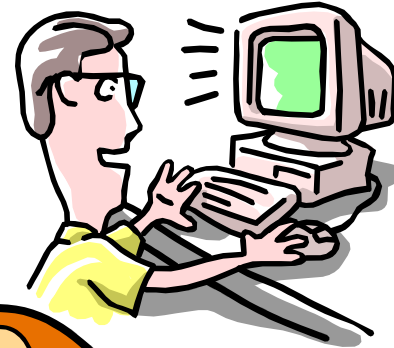
bhanna@fisinc.com
bhanna@fisinc.com



Issue - Staff and Funding Reductions



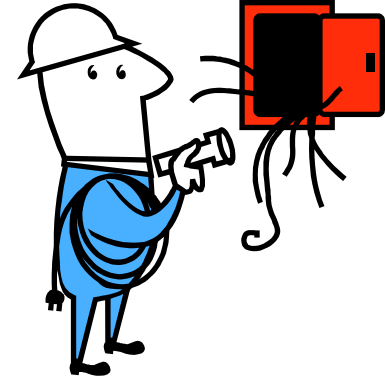
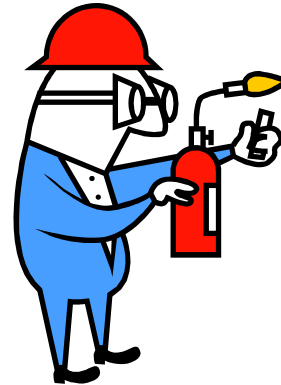
Doing more work with the same number of people. No common knowledge base. No data sharing. No work history. Warranties. Outsourcing.



Issue - Extending the life of aging facilities



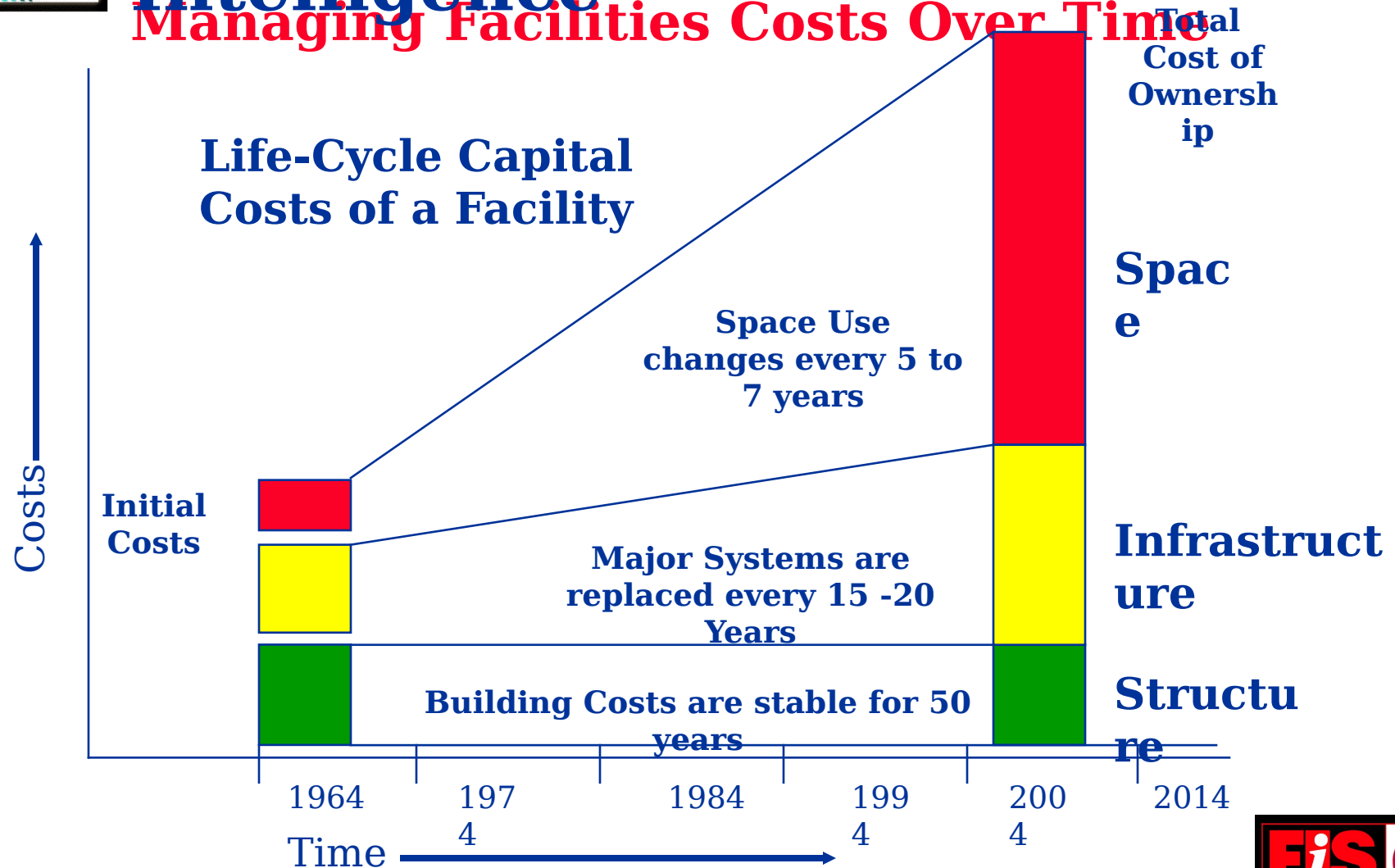
Many buildings were constructed in the 50's 60's and 70's, reaching the useful life of a facility without major remodeling.

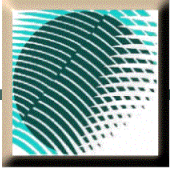




Issue - Facilities Business Intelligence

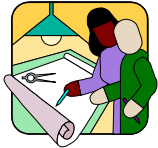
Managing Facilities Costs Over Time





Issue - Total Cost of Ownership

Cost of ownership of a facility is equal to the total expenditures an owners makes over the course of a facility's service life:



Utilities



Maintenance

Housekeeping



Technology

Support Personnel

Professional Services

Regulatory Requirements

Furniture and Equipment



Operations

Moves

Security



Grounds Keeping

Renovations

Leases

Use enterprise-level facilities management software tools to capture the costs for your financial system

Measure Your Progress and Performance in Financial Terms



Issue - Where to Find and Prove Value



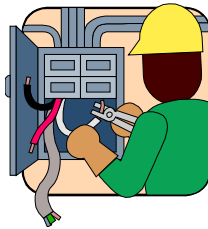
Data Standards -- Easy Access -Quick Response

Space Management -- Utilization of Space

Asset Management --Tracking Ownership/History

Move Management -- Churn

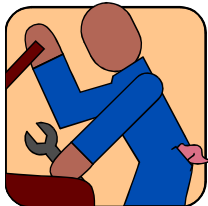
Integrated Software Packages -- FCA/CMMS/CAFM



Smart Building Systems -- Automated Systems
Maintenance -- Predictive not Preventative

Warehousing -- Reduce -- Consolidate

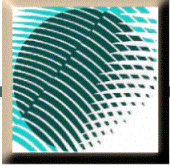
Housekeeping -- Maintaining Space
--Maximum use of space



Maintenance -- Maintenance History - Regulatory

Staff Reduction -- Access to Information

Outsourcing -- Information Standards - Availability



Three Key Themes for Success

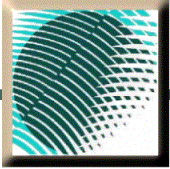
- 1. Choose solution tools that interoperate at the enterprise (ERP) level.**
- 2. Qualify applications as best-of-class based on industry trends and organizational requirements.**
- 3. It's really all about data quality - so manage your investments well.**



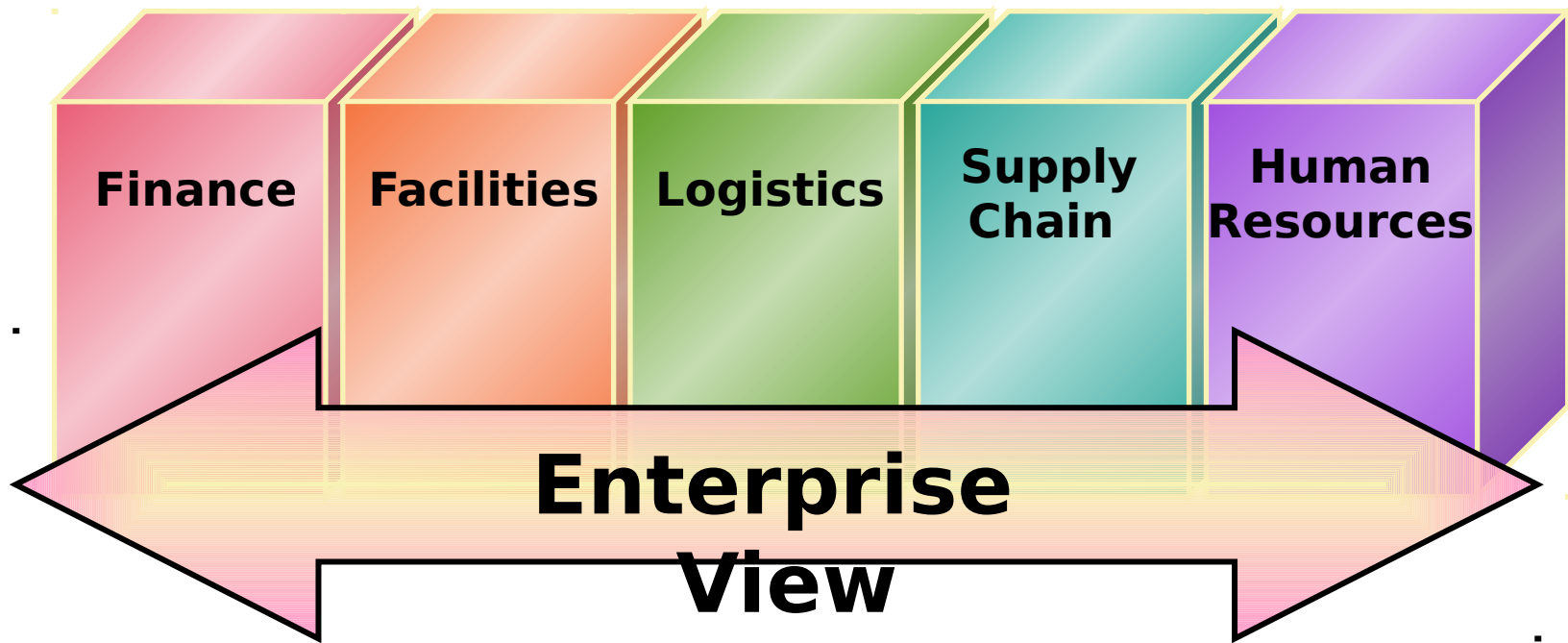
ERP

Enterprise
Resource Planning

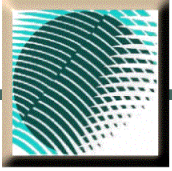




Enterprise View of Information

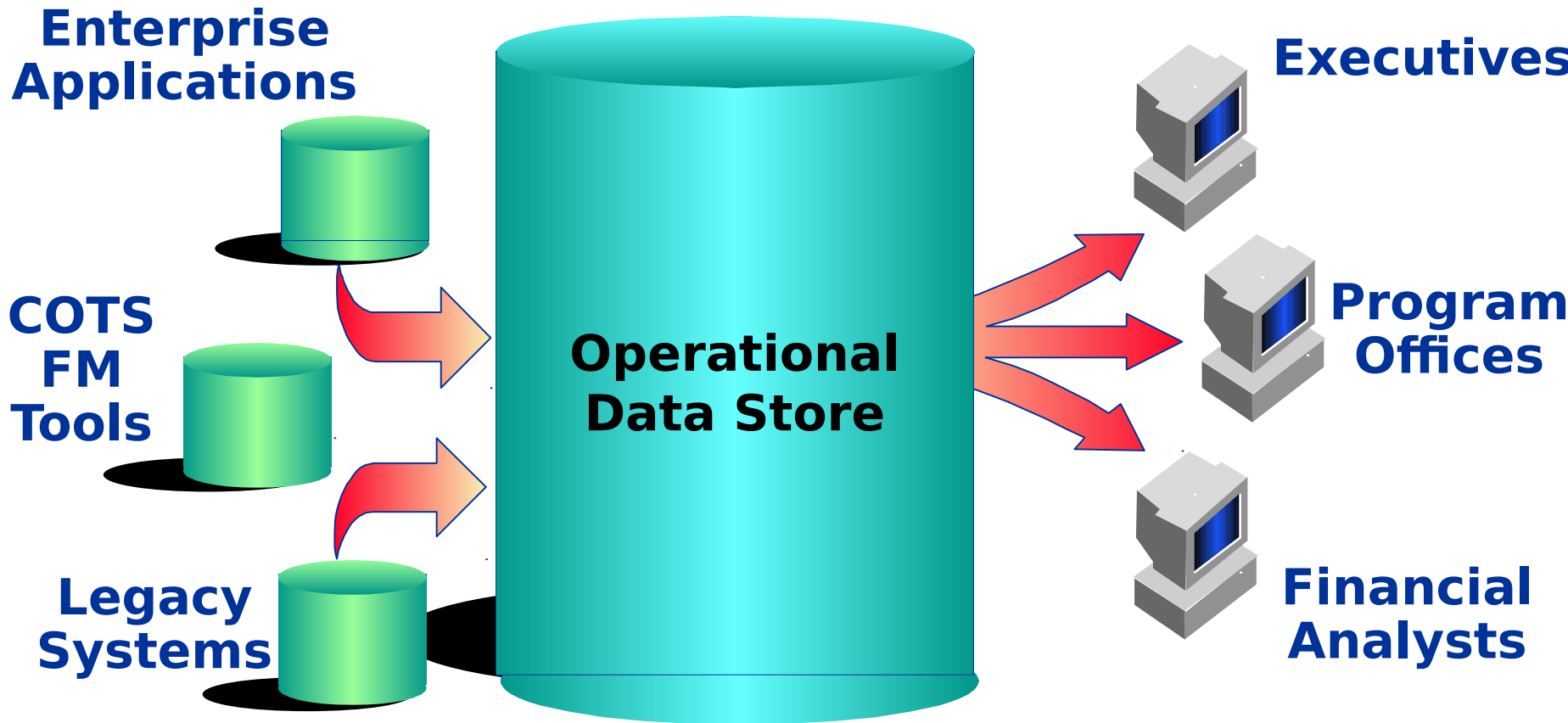


Operational Data Store Consolidates Information from All Sources



Integrated Data Warehouse

Any Source, Any Data, Any User

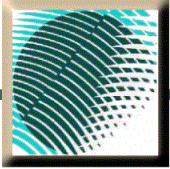




Question: Why Facilities in ERP?

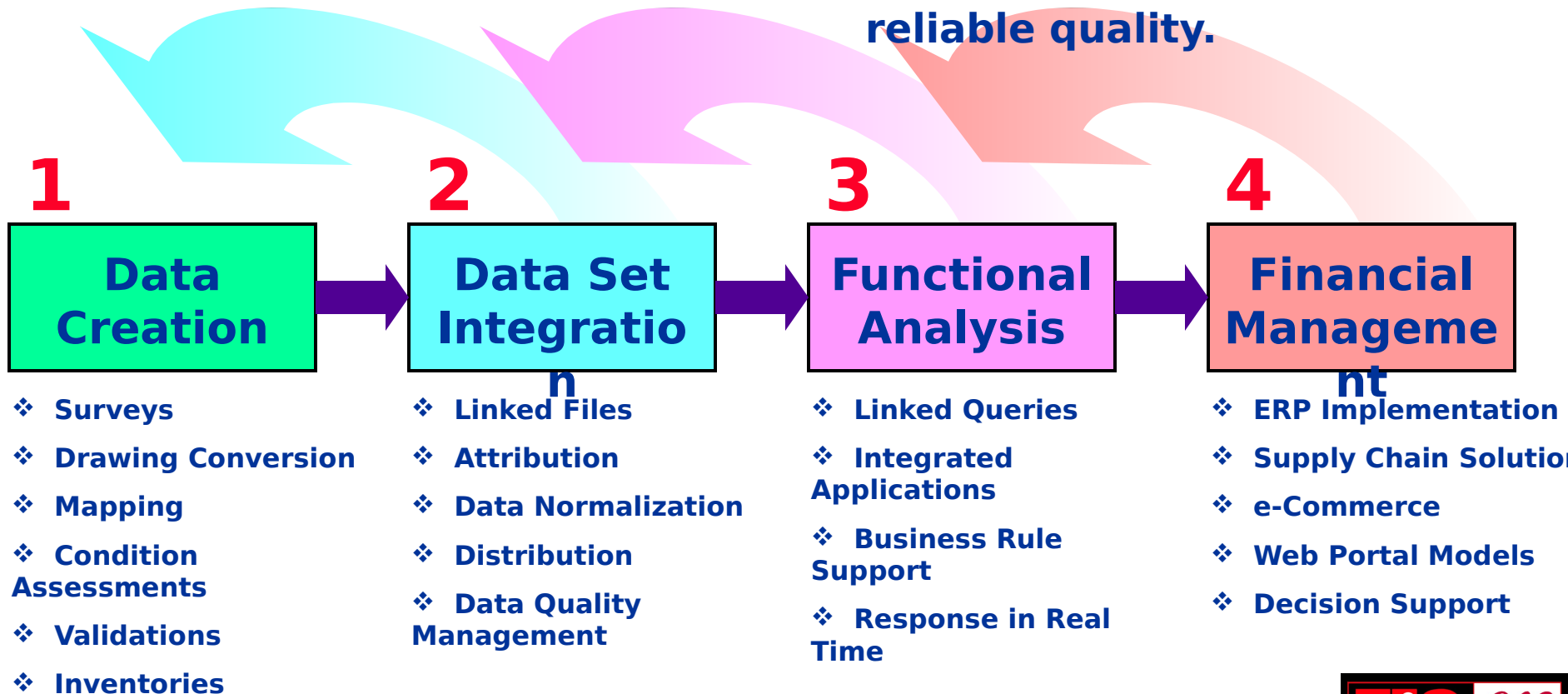
- **Facilities are a critical component in effective ERP management and in achieving meaningful business results**
- **After personnel, facilities represent the largest expense to an organization**
- **Implementing facilities with an ERP focus does not mean swallowing the whole elephant at once**
- **Is it really all about the money?
How do I translate facilities information into dollars?**





Building Towards Successful ERP

Forward steps are successful
only when prior ones
demonstrate sustained and
reliable quality.





Best- of- Class





Support to the Entire Organization

Chief Financial Officer

business metrics, economic analyses

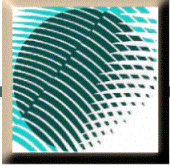


Chief Information Officer

technology standards,
integration management

Chief Facilities Manager

real estate
operations, assets
utilization, data
stewardship



Making Smart Decisions

- *In facilities management, no single product or System does it all. The current state of technology is from **interoperable best-of-class solutions***
- Interoperable solutions can (should) be implemented incrementally
- Each solution increment should individually and positively demonstrate time-in-market performance
- The choice for **best-of-class** is unique to each organization, based on:
 - Specific Metrics
 - Criteria
 - Business Rules
 - Return on Investment (ROI)



Platform for Facility Management

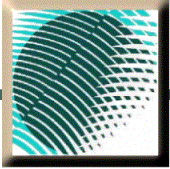
The facts are:

- Oracle is the at-large choice for enterprise information management in most major organizations.
- Oracle is established as the leading backbone for enterprise systems and applications.
- Most major applications software companies will develop stable products for Oracle platforms first.
- FIS is the only enterprise-level CAFM solution suite that fully leverages Oracle technology, integrity and security.



ORACLE®





CAFM and CMMS Interoperability

Property Management

File Edit Entry Space Window Help

Property Information[rel.w_i_bld_e] - 2 of 11

Region Code: LA LOS ANGELES AREA
Facility Id: S15 LA
Property: BLDG 100 ADMINISTRATION BUL
Property Type:
Status: OPEN Zone:
Address: 1232343 WEST HOLLYWOOD BL
P.O. BOX 446432
City: BH County: LA
State: CA Zip: 90205 Country: USA

Location	Description	Floor
100A	RECEPTION CONF. RM. 1	FLR 1
100B	PRIMARY CIRCULATION	FLR 1
110	PRODUCT DISPLAY ROOM	FLR 1
1110	OFFICE	FLR 1
1111	OPEN WORKSTATION	FLR 1

AutoCAD Map - [keysite.dwg]

File Edit View Insert Format Tools Draw Modify EM Enterprise Help EM Enterprise Map KEY SRC

Project [keysite.dwg]

- Drawings
 - C:\FISFDC_A\DWG\G\1001.dwg
 - C:\FISFDC_A\DWG\G\1002.dwg
 - C:\FISFDC_A\DWG\G\1003.dwg
 - C:\FISFDC_A\DWG\G\2001.dwg
 - C:\FISFDC_A\DWG\G\200mezz.dwg
 - C:\FISFDC_A\DWG\G\6031.dwg
 - C:\FISFDC_A\DWG\G\park.dwg
- Query Library
 - Current Query
 - Employee
 - i>ShowEmp
 - DEMO6
 - Demo2
 - Equipment
 - i>ShowEQT
 - Demo3
 - Furniture
 - i>ShowEQNT
 - Demo4
 - Space
 - i>ShowSpace
 - Demo7
 - Demo5
 - Demo1
 - ATEXT
 - WorkOrders
- Databases
 - ORACLE7.0RCL.FISDEMO
- Topologies
- Link Path Names

Executing SQL query...done.
0 object(s) have been queried.
Command:

[244'-0 1/8", 55'-5 15/16", 0'-0"] [SNAP GRID ORTHO OSNAP MODEL TILE]

Start Inbox - Microsoft Outl. untitled - Paint C:\WINNT\PROFIL... FM Enterprise Menus Property Management AutoCAD Map - [11:53 AM

CMMS Application

CAFM Application

FiS on ORACLE



CAFM and CMMS Data Mapping

Data between applications is mapped and transaction protocols are set.

FIS/FM
File Edit Query GoTo Help Window

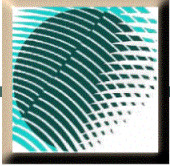
FSC Column Mapping Overview

App Name	Interface Table	Table Name	Column
From: CMMS	LOCATIONS	LOCATIONS	LOCATIO
To: FIS	MAX_LOC_LOCH	MAX_LOC_LOCH	LOCATIO
	4 Load Sequence	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Recd
From: CMMS	LOCATIONS	LOCHIERARCHY	PARENT
To: FIS	MAX_LOC_LOCH	MAX_LOC_LOCH	PARENT
	4 Load Sequence	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Record Enabled
From: CMMS	LOCHIERARCHY	LOCATIONS	DESCRIPTION
To: FIS	MAX_LOC_LOCH	MAX_LOC_LOCH	DESCRIPTION
	4 Load Sequence	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Record Enabled
From: CMMS	LOCHIERARCHY	LOCATIONS	L01
To: FIS	MAX_LOC_LOCH	MAX_LOC_LOCH	L01
	4 Load Sequence	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Record Enabled
From: CMMS	LOCHIERARCHY	LOCHIERARCHY	LH1
To: FIS	MAX_LOC_LOCH	MAX_LOC_LOCH	LH1
	4 Load Sequence	<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Record Enabled

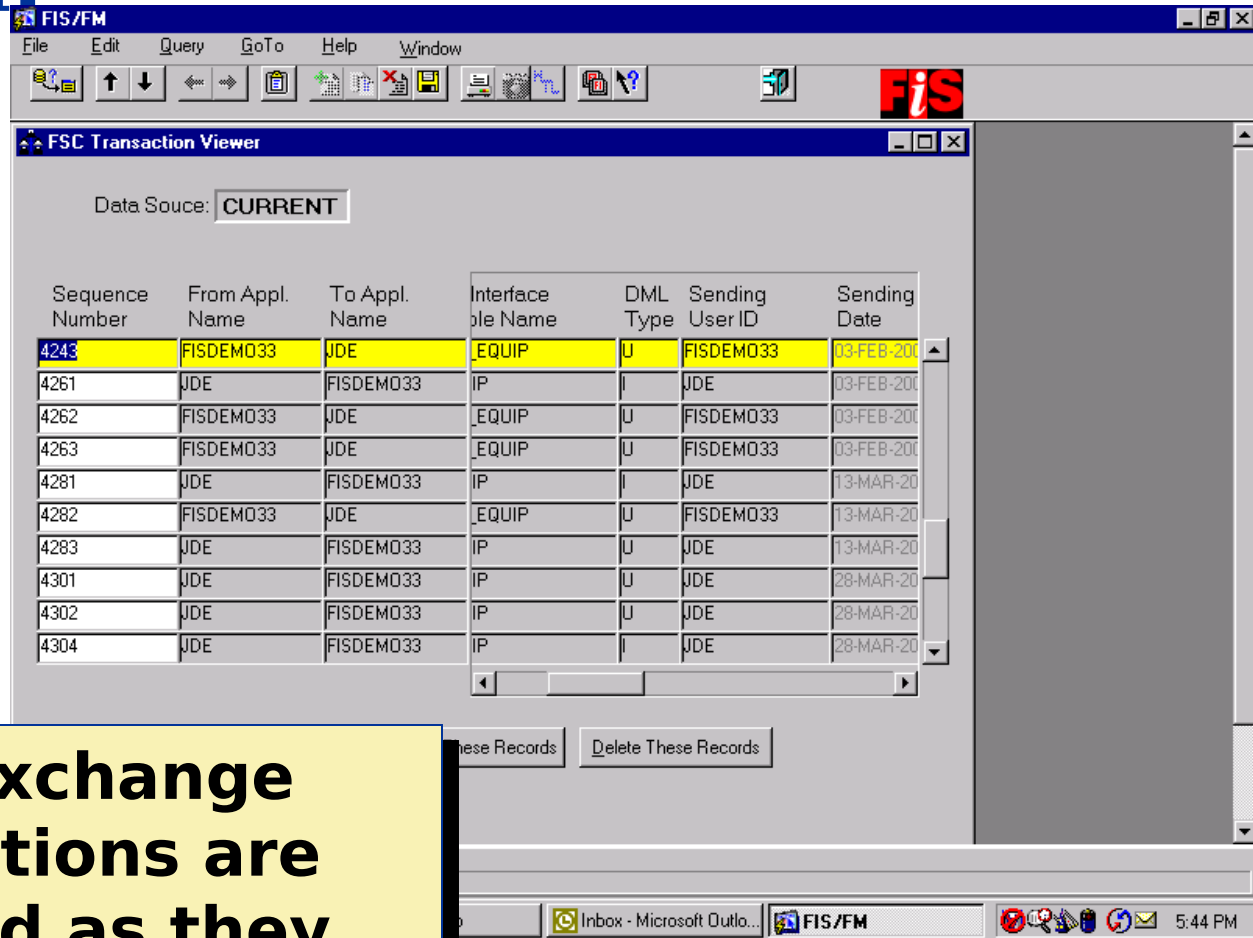
Details

Enter the name of the SENDING Application.
Record: 10/? List of Values

Start Microsoft PowerPoint ... Palm Desktop Inbox - Microsoft Outlo... FIS/FM 5:46 PM



Data Exchange Tracking - Audit Trail



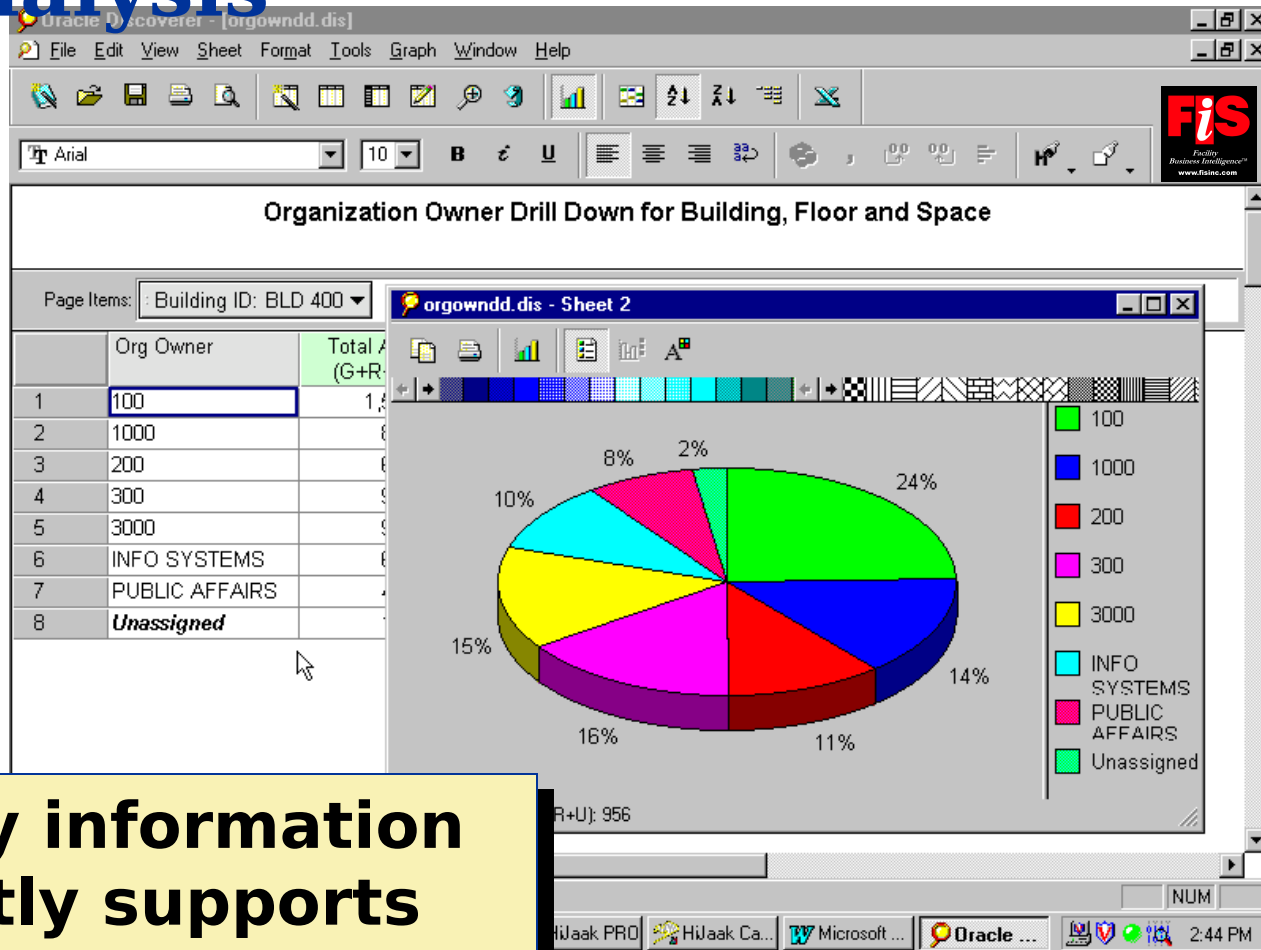
The screenshot shows the FIS/FM FSC Transaction Viewer window. The 'Data Source' is set to 'CURRENT'. The table displays a list of transactions with columns for Sequence Number, From Appl. Name, To Appl. Name, Interface Name, DML Type, Sending User ID, and Sending Date. The first row (Sequence Number 4243) is highlighted in yellow. Below the table are buttons for 'These Records' and 'Delete These Records'.

Sequence Number	From Appl. Name	To Appl. Name	Interface Name	DML Type	Sending User ID	Sending Date
4243	FISDEMO33	JDE	EQUIP	U	FISDEMO33	03-FEB-20
4261	JDE	FISDEMO33	IP	I	JDE	03-FEB-20
4262	FISDEMO33	JDE	EQUIP	U	FISDEMO33	03-FEB-20
4263	FISDEMO33	JDE	EQUIP	U	FISDEMO33	03-FEB-20
4281	JDE	FISDEMO33	IP	I	JDE	13-MAR-20
4282	FISDEMO33	JDE	EQUIP	U	FISDEMO33	13-MAR-20
4283	JDE	FISDEMO33	IP	U	JDE	13-MAR-20
4301	JDE	FISDEMO33	IP	U	JDE	28-MAR-20
4302	JDE	FISDEMO33	IP	U	JDE	28-MAR-20
4304	JDE	FISDEMO33	IP	I	JDE	28-MAR-20

Data exchange transactions are recorded as they occur.

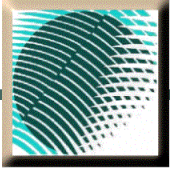


Facility Business Intelligence and Analysis



**Facility information
directly supports
financial management
and planning.**

Ad Hoc Management Reporting



Oracle Discoverer - [Gsa03.dis]

File Edit View Sheet Format Tools Graph Window Help

Page Items: Lease ID: GSD1-B-001 OA: OA002943

Occupancy Agreement
Financial Summary
21-MAR-2000
1 of 1

Public Buildings Service

					Annual Cost
	12	Adjustments Extra Service	b. Agency Provided Trash Removal	Credit	\$23.00
	13	Parking	a. Structured (Parking Spaces)	5@ \$100.00	\$500.00
	14	Parking	b. Surface (Parking Spaces)	9@ \$0.00	\$0.00
	15	Rent Charges Other Spaces	Rent Charges for Other Spaces		\$0.00
	16	PBS Fees	PBS Fees		\$36,186.00
	Agency Rent Subtotal				\$169,359.00
Market	1	Shell Rental Rate	Shell Rental Rate (General Purpose)		\$480,068.00
			Total Allowance Used		\$86,454.00
			Lease Term (In Months)		60 Months
			Operating Costs		Operating Cost Escalation Applies \$15,000.00
			State Tax		Real Estate Escalation Applies \$2,000.00
					\$583,522.00
			Annual Rent		\$752,881.00

Desktop FIS/FM Reports Bac... Oracle Di... 8:58 PM

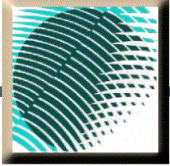
**User-defined reports
show specific
financial performance
to management.**



Data Qualit y

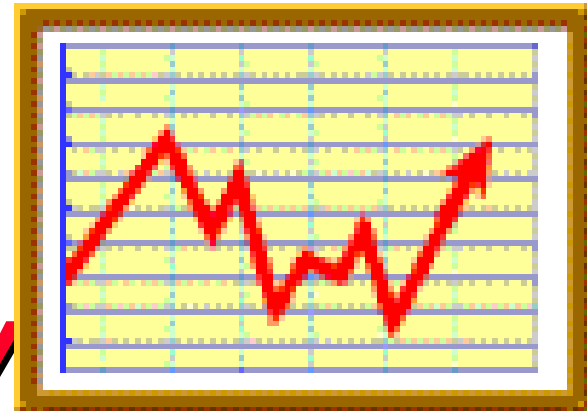


Investment Bond Analogy for Data



- Best investments are **AAA Rated**

- “A” for **Age**
- “A” for **Accuracy**
- “A” for **Access**





Data Stewardship is Critical

- **Who “owns” the responsibility for the data?**
- **Are they equipped and capable of maintaining it to the desired level of quality?**
- **Is maintaining data quality part of the organization’s and employees’ performance criteria?**
- **Is it really worth the expense?**

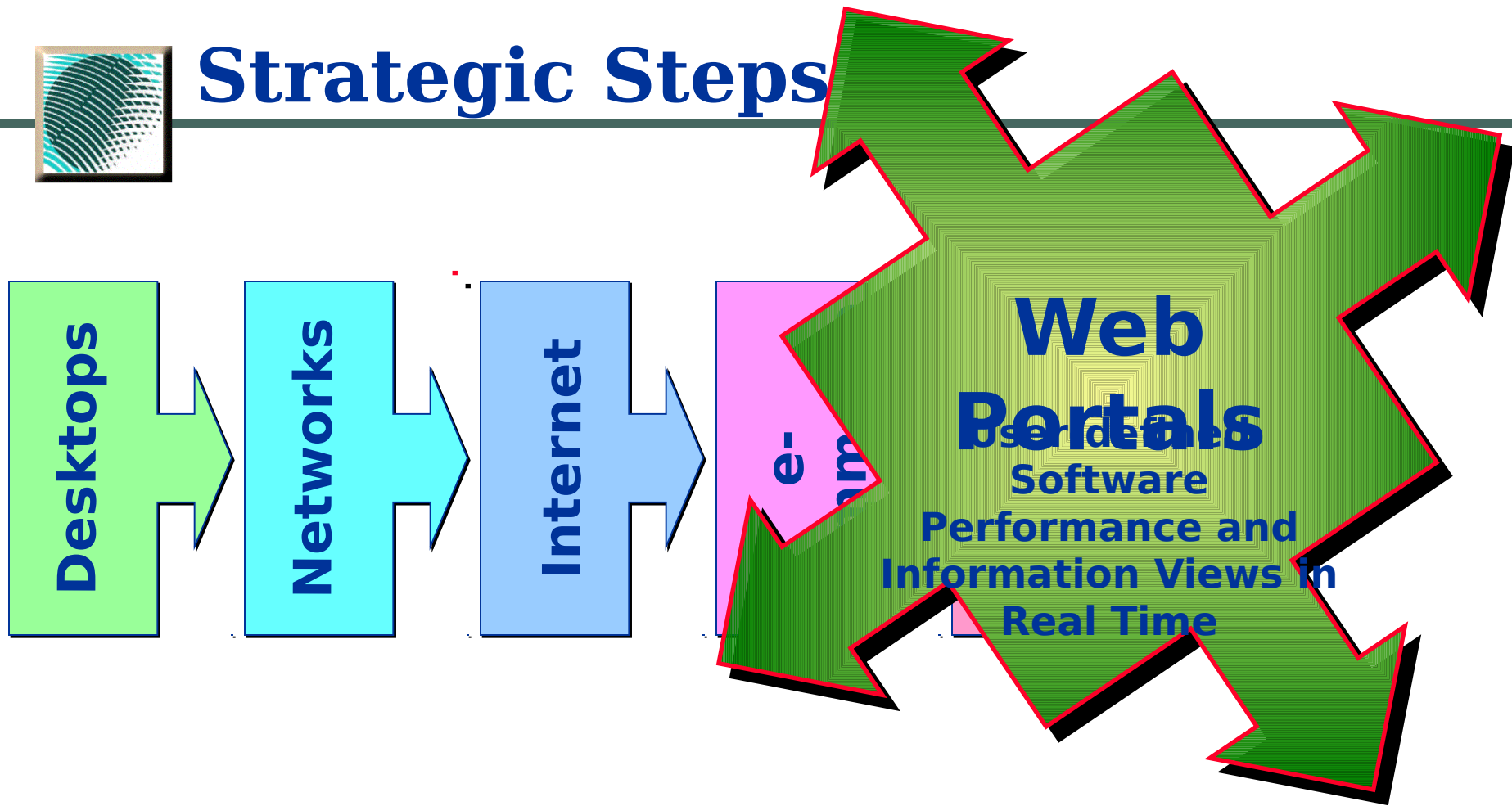


What lies ahead ?

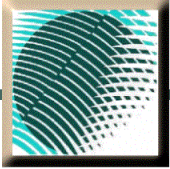




Strategic Steps



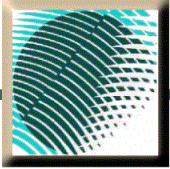
- Web Portal Technologies will drive the market
- The Internet “IS” the computer



100% Internet-enabled Apps

Lower Your Costs of Deployment and Operation

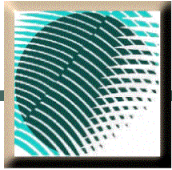
- **No desktop client software is needed:**
 - ***Run all applications using just your web browser***
- **Use corporate intranet for internal transactions; public internet for e-commerce**
- **Make any software changes easily ... centrally**



Value-based Implementation

- **Only implement solutions that you first qualify as best suited for your organization at the ERP level**
- **Pay the most attention to the data - it represents your largest investment**
- **Manage by Return on Investment (ROI)**
 - Both direct and indirect returns
 - Both near-term and life cycle scenarios





10 Rules for Success

- 1. Define the Data Based on Business Rules**
- 2. Find the Software**
- 3. Don't Automate a Mess**
- 4. Make Someone Responsible**
- 5. Allow Adequate Time**
- 6. Know Who You Are Dealing With**
- 7. Settle for a Close Fit**
- 8. Talk to Existing Users**
- 9. Evaluate Service and Support**
- 10. Plan for Success**





Demonstrated Success

- **Better deployment of facilities assets**
 - Maximizes operational productivity with minimal implementation costs
- **Extended ERP Implementations**
 - Ties facility assets management to financial management, using location as a hub for information
- **ROI is easy to calculate**
 - \$ per SQ. FT. = \$ millions in annual savings
- **Industry, Academia and Government “CORPORATE STANDARDS”**
 - Intel, Cisco, Sprint, Xerox, USSA
 - USA General Services Administration, US Navy, US Dept. of Energy

Univ. of Chicago, Emory Univ.

